

REMARKS

On an initial note, the Applicant wishes to thank the Examiner for courtesies extended to the Applicant's representative at the personal interview conducted on January 19, 2006. Applicants have amended Claims 1, 4, 6, 8, 9, 13, 15, 16, 19, 21, 22, 25, 27, 28, 29, and 32, and have canceled Claims 7, 11, 12, 23, and 24. The Applicant submits that these minor amendments and corrections herein are made without prejudice as to patentability, including the doctrine of equivalents, and no new matter has been added. Attached hereto is evidentiary support in the form of two rule 132 declarations: Attachment 1, Declaration of Lani Craddock, and Attachment 2, Declaration of Rodney L. Pettis.

Claims 1-6, 8-10, 13-21, 22, and 25-35 are Not Obvious

The Examiner rejected Claims 1-7 and 9-35 under 35 U.S.C. § 103(a) as being unpatentable over Schirmer et al., U.S. Pat. No. 5,219,666 ("Schirmer"), and Claim 8 as being unpatentable over Schirmer in further view of Phillips, U.S. Patent No. 3,580,380 ("Phillips"). Applicant respectfully disagrees.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. The suggestion or motivation to modify the reference and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. Finally, the prior art reference must teach or suggest all claim limitations. *See* MPEP 2143.

Schirmer describes two general embodiments for a multilayer film useful as an overwrap material for trade retail cuts of meat or other food products in a supermarket or other retail environment and a multilayer film useful in forming labels or tamper evident bands for vessels such as bottles, cans, and the like. First, Schirmer describes a multilayer (five-layer) film formed of a very low-density polyethylene (VLDPE) core, two styrene butadiene copolymer outer layers, and two intermediate polymeric adhesive layers each bonding the core layer to a respective outer layer. Second, Schirmer briefly describes an alternative embodiment in which a

multilayer film instead is formed of "a single layer of VLDPE" adhered to "a single layer of styrene butadiene copolymer," either "directly" forming a two-layer film or "by means of a polymeric adhesive layer" forming a three-layer film. *See* col. 12, lines 26-31. The characteristics of these multilayer films depend upon the composition and thickness of each of the layers.

No Suggestion or Motivation to Combine or Modify References

There are three possible sources for a motivation to combine references: "the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *See* MPEP § 2143.01. Further, if an obviousness rejection is based on a single reference, then there must be a suggestion or motivation to modify the teachings or disclosures in that reference. *See B.F. Goodrich Co. v. Aircraft Breaking Sys. Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996).

Regarding the nature of the problem, Applicant respectfully submits that Schirmer's invention and the embodiments of Applicant's invention are directed at very different problems. Schirmer is concerned with replacing polyvinyl chloride (PVC) packaging used "for overwrapping trayed food products" and for labeling on "cans and bottles." *See* col. 1, lines 10-51. Applicant's invention is for a multilayer film that has both advantageous optical and mechanical properties for packaging products. The need for these characteristics, as claimed, in Applicant's invention are completely different from the need for related characteristics, that may appear upon casual observation to be similar, in Schirmer's disclosure, teaching, and invention as claimed. When the nature of the problem being solved is considered, because two different problems are being solved, clearly there is no motivation to modify or combine Schirmer to produce the invention that Applicant is claiming. *See Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 68 (1923).

Regarding teachings of the prior art, the motivation or suggestion may be explicit or implicit from the prior art reference as a whole. *See* MPEP 2143.01. First, in the brief mention of direct adherence of an SBC layer to a very low-density polyethylene (VLDPE) layer, nothing teaches, suggests, or even hints that more than two layers may be directly adhered to each other. Clearly, Schirmer does not explicitly provide such motivation to add additional layers. Schirmer

also does not implicitly provide such motivation. As noted above, Schirmer describes a multilayer (five-layer) film formed of a VLDPE core, two styrene butadiene copolymer outer layers, and two intermediate polymeric adhesive layers each bonding the core layer to a respective outer layer; and briefly introduces an alternative embodiment in which a multilayer film is instead formed of "a single layer of VLDPE" adhered to "a single layer of styrene butadiene copolymer," either "directly" forming a two-layer film, presumably by use of cross-linking, or "by means of a polymeric adhesive layer" forming a three-layer film. *See* col. 9, line 61-63 and col. 12, lines 26-31. Schirmer also describes that variations in the composition of the Schirmer film results in not necessarily positive variations in elasticity and shrink back. *See* col. 9, lines 42-47. As noted in para. 4b3, Attachments 1 and 2, without experimental testing such as that which provides the results illustrated in Schirmer Table 2, the thicknesses and/or composition of the layers required to achieve results similar to that described with respect to the five-layer embodiment would be speculative.

Regarding knowledge of persons of ordinary skill in the art, as noted by the Federal Circuit "[r]arely ... will the skill in the art component operate to supply missing knowledge or prior art to reach an obviousness judgment." *See Al-Site Corp. v. VSI Int'l, Inc.*, 50 USPQ2d 1161, 1171 (Fed. Cir. 1999) (citing *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983)). As such, without the benefit of the present Application as a road map to the Applicant's invention, as noted in para. 4b3, Attachments 1 and 2, one skilled in the art would not have gleaned from the five-layer primary embodiment or the two/three-layer alternate embodiment, a three-layer film having elastomer outer layers directly surrounding and in direct contact with and adherence to respective sides of a polyolefin layer. Nor is there motivation to develop it.

No Reasonable Expectation of Success

The Examiner has also failed to meet the second element of a *prima facie* case for obviousness because there must be, and there is not in this present case, a reasonable expectation of success. Because the test data described in Schirmer only applied to the five-layer embodiment, without additional experimental testing, the thicknesses and/or composition of the layers required by this newly created three layer arrangement (SBC/VLDPE/SBC) derived by the

Examiner based on the Applicant's disclosure necessary to achieve results similar to that described with respect to the five-layer embodiment would be speculative at best. Additionally, the newly created structure would not provide the advantages of the Applicant's invention. For example, VLDPE is used in the Schirmer film to enhance toughness and puncture properties, but would not be generally suitable for use in shrink bundling films without having to electronically crosslink the polymer. *See* para. 4b2, Attachments 1 and 2. Advantageously, the claimed packaging film can utilize lower cost materials, e.g., LDPE or EVA, which are suitable for use in shrink bundling applications without the need to use such expensive crosslinking processes.

Schirmer Does Not Teach or Suggest All Claim Limitations

Applicant respectfully submits that the Examiner has failed to meet the third element of a *prima facie* case for obviousness, which requires all claim limitations be taught or suggested. As described previously herein, the reference does not describe or suggest, at least, a film having "a first outermost layer of elastomer, a second inner layer of polyolefin overlying and/or abuttingly contacting the first outermost layer of elastomer, and a third outermost layer of elastomer overlying and/or abuttingly contacting the second inner layer of the polyolefin so that the second inner layer of polyolefin is positioned between the first and the third outermost layers of elastomer," as featured in the independent Claims 1, 15, 27, and 28, as originally filed or as amended. More particularly, Schirmer does not disclose, teach, or suggest film, such as shrink-wrap packaging film, contacting and substantially surrounding a product and shrunk thereon or a layer of polyolefin positioned between and *abuttingly* contacting two layers of elastomers. The reference passage provided by the Examiner, col. 8, lines 10-20, refers to a shrink label and not a shrink wrap packaging film. Additionally, as discussed previously, and as acknowledged by the Examiner, none of the embodiments either described or identified in Schirmer disclose, teach, or suggest the claimed structure elastomer/polyolefin/elastomer without an intermediate adhesive layer. A structure having, e.g., elastomer/polyolefin, would not suggest a structure having elastomer/polyolefin/elastomer as the mechanical and/or optical properties would likely be vastly different. *See* para. 4b3, Attachment 1 and 2. Correspondingly, the independent claims define over the cited patent documents.

As also indicated in the January 19, 2006, interview, the features of Claims 6, 7, 28, and 32, in combination still further define over the cited patent documents. That is, as will be described in more detail below, Schirmer does not describe, teach, or suggest (1) a first layer in a range of about 10% to about 25%, a second layer of polyolefin in a range of about 50% to about 80%, and a third layer of a sheet of elastomer in a range of about 10% to about 25% of the overall packaging film gauge thickness, as featured in original Claim 6; (2) a combination of enhanced mechanical and optical properties including a measurement of shrink in a transverse direction in a range of about 0% to about 60% and in a machine direction in a range of about 60% to about 90%, a tensile modulus in a range of about 50,000 psi to about 120,000 psi, and a tensile strength in a range of about 2000 psi to about 3500 psi, as featured in Claim 28; or (3) a haze in a range of about 1% to about 10% so that the packaging film is clear and a product can be seen easily through the packaging film, as featured in original Claims 7 and 32.

More specifically, Schirmer does not teach or suggest a film gauge thickness whereby the polyolefin is between about 50% to about 80%. Schirmer identifies a VLDPE thickness of 42% in its five-layer example but provides no ranges for its two-layer. To suggest that one should increase the thickness of the VLDPE in response to a hypothetical removal of the intermediate adhesive layers to achieve results similar to that described with respect to the five-layer embodiment is pure speculation not supported by any data or disclosure in the reference. *See* para. 4b3, Attachments 1 and 2.

Schirmer also does not disclose, teach, or suggest haze in a range of about 1% to about 10% as featured in the independent Claims 1, 15, 27, and 28, as amended. Schirmer identifies that its film is "ultra-clear" and "glossy." One skilled in the art would not find the claimed properties or range inherent or inherently disclosed by such ambiguous statement or terminology. *See* para. 4b4, Attachments 1 and 2. By the same reasoning, Schirmer fails to teach a 45 degree gloss in a range of about 70% to about 110%, as featured in independent Claim 27 and dependent Claims 9, 22, 33.

Schirmer also does not disclose, teach, or suggest a tensile modulus in a range of about 50,000 psi to about 120,000 psi. Schirmer identifies that its label film has a "higher" modulus to permit use in a roll stock form in conjunction with label manufacturing apparatus. One skilled in the art, however, would not find the claimed properties or range inherent or inherently disclosed

by such ambiguous statement or terminology. *See id.* The reference passage cited by the Examiner merely stands for the Schirmer film having sufficient stiffness to be used to make labels with no reference to any type of reference that would indicate the definition of "higher."

Schirmer also does not disclose, teach, or suggest a tensile strength in a range of about 2000 psi to about 3500 psi. *See id.* The Examiner states that it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the [Schirmer] film to provide the claimed tensile strength so that "the shrink-wrap packaging film can withstand forces applied thereto being placed upon the shrink-wrap packaging film." Schirmer, however, was not interested in shrink-wrap packaging film but rather providing overwrap material for trade retail cuts of meats or other food products in a supermarket or other retail environment, and thermoplastic film useful in forming labels or tamper evident bands. Therefore, as described previously, there would be no reason to "optimize" the Schirmer film to solve a problem different than the problems faced by Schirmer. Thus, one skilled in the art would not find the claimed properties or range inherent or inherently disclosed.

Schirmer also does not disclose, teach, or suggest a measurement of shrink in a transverse direction in a range of about 0% to about 60% and in a machine direction in a range of about 60% to about 90%. Although Schirmer states that its manufacturing process has the flexibility to orient films in both directions, col. 5, lines 35-45, Schirmer does not disclose, teach, or suggest formation of shrink-wrap film, nor does it suggest how much shrink it considers optimal. The Examiner's premise that it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide shrink according to the claimed ranges to solve a problem (shrink wrap film) different than its own problems is insufficient as there would be no reason for one skilled in the art to "optimize" the Schirmer film to solve a problem different than the problems faced by Schirmer.

Accordingly, in order to expedite the advancement of allowance of the present Application, the Applicants have amended independent Claim 28, without prejudice, to include the features of Claims 6, and 7, and 32, and have amended independent Claims 1, 15, and 27, without prejudice, to include the features of Claims 6, 7, 28 and 32. Accordingly, independent Claims 1, 15, 27, and 28, as originally filed and as amended, have been shown to be novel,

nonobvious, and allowable with respect to the cited art. Correspondingly, dependent Claims 2-6, 8-10, 13-14, 16-21, 22, 25-26, and 29-35 have likewise been shown to be allowable.

The dependent claims further have independent novelty and are nonobvious. For example, the elastomer featured in Claims 3, 18, and 30, has a different chemical structure than that of styrene butadiene copolymer, and the polyolefin featured in Claims 4, 19, and 31 has a different chemical structure than that of VLDPE. Additionally, Claims 6 and 21 (as amended) feature a film gauge thickness above that of the 1 mil identified by the reference passage provided by the Examiner. *See* col. 8, lines 1-5. Also for example, Schirmer also does not disclose, teach, or suggest packaging film that is readily usable with packaging machinery at relatively high speeds, as featured in Claim 16, but rather sufficient stiffness to be used in label manufacturing apparatus. Additionally, although the Schirmer invention includes label film, it does not disclose, teach, or suggest printing on shrink-wrap packaging film such as that claimed by the Applicant or even the overwrap film included in the Schirmer invention, as featured in Claim 10. Nor does Schirmer suggest how much shrink it considers optimal for its own invention much less that featured in Claims 13, 25, and 32. Schirmer further does not disclose, teach, or suggest a dart impact strength in the range of about 300 grams to about 1000 grams, as featured in Claims 14, 26, and 35. Such requirements would not necessarily be a requirement for an overwrap material for retail meats, a label, or a tamper band which must readily break in order to not prevent a user from opening the vessel (bottle). *See* para. 4b4, Attachment 1 and 2. Thus, one skilled in the art would not find the claimed properties or range inherent or inherently disclosed. Nor does Schirmer disclose, teach, or suggest packaging film that is readily usable with packaging machinery at relatively high speeds, as featured in Claim 16, but rather "sufficient stiffness" to be used in label manufacturing apparatus. Still further, even if Schirmer is combinable with Phillips, the combination does not teach positioning indicia on the "cans" positioned laterally adjacent each other so that the indicia can be seen more clearly through shrink wrap packaging film without the need to remove the film, as featured in Claim 8. The Schirmer reference passage, col. 8, lines 11-12, refers to label film placed around each can and not packaging film substantially surrounding the product (plurality of cans). The Phillips reference passage, col. 3, lines 45-55, refers to a tube which would conceivably stack the cans end-to-end rather than laterally.

Therefore, Applicant respectfully submits that the Examiner has not established a *prima facie* case of obviousness because, as a minimum, Examiner has not shown: (i) some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference; (ii) a reasonable expectation of success; or (iii) a teaching or suggestion of all claim limitations either original or as amended. Thus, the Application is in condition for allowance.

Please note, in commenting upon the references and in order to facilitate a better understanding of the differences that are expressed in the claims, certain details of distinction between the references and the present invention have been mentioned, even though such differences do not appear in all of the claims. It is not intended by mentioning any such unclaimed distinctions to create any implied limitations in the claims. Not all of the distinctions between the prior art and Applicant's present invention have been made by Applicant. For the foregoing reasons, and without prejudice, Applicant reserves the right to submit additional evidence showing the distinctions between Applicant's invention to be nonobvious in view of the prior art.

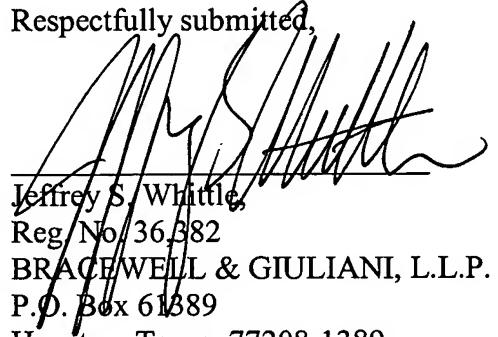
The foregoing remarks are intended to assist the Examiner in re-examining the application and in the course of explanation may employ shortened or more specific or variant descriptions of some of the claim language. Such descriptions are not intended to limit the scope of the claims; the actual claim language should be considered in each case. Furthermore, the remarks are not to be considered to be exhaustive of the facets of the invention that render it patentable, being only examples of certain advantageous features and differences that Applicants' attorney chooses to mention at this time.

CONCLUSION

In view of the amendments and remarks set forth herein, Applicant respectfully submits that the application is in condition for allowance. Accordingly, the issuance of a Notice of Allowance in due course is respectfully requested.

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Respectfully submitted,


Jeffrey S. Whittle,
Reg. No. 36,382
BRACEWELL & GIULIANI, L.L.P.
P.O. Box 61389
Houston, Texas 77208-1389
Telephone: (713) 221-1189
Facsimile: (713) 221-2141

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